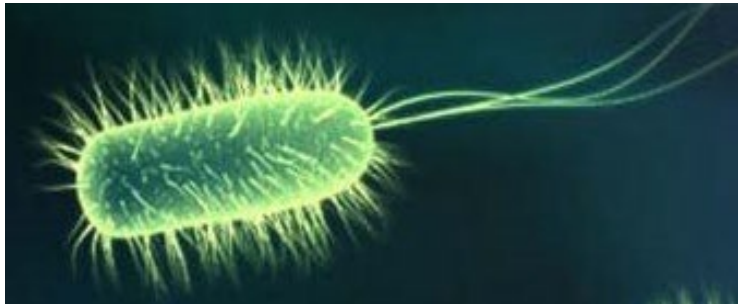
# Phosphorus, PFAS, Pathogens, and the Salt and Nutrient Management Plan

and other special studies required in the new NPDES permit



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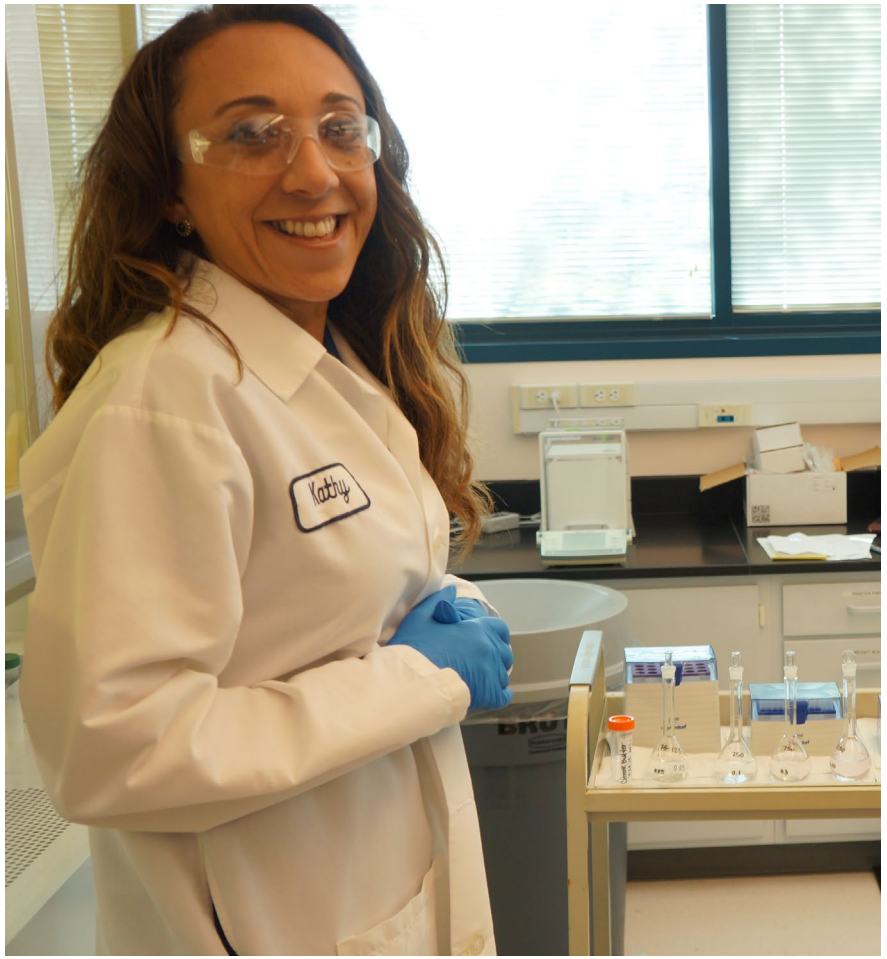
# Environmental Services

- Phosphorus limit
- Special provisions in new NPDES Permit
- PFAS update
- What is new in the Laguna Environmental Laboratory

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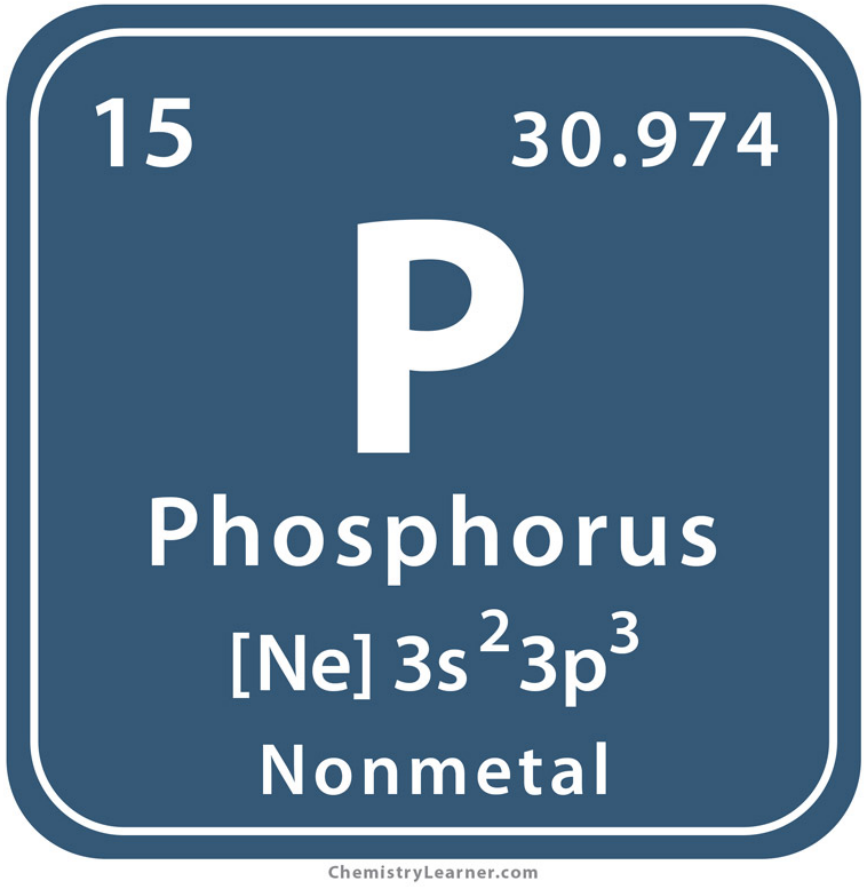
# Phosphorus

- Water Quality Trading Framework
- NOP Projects (Current 14,500 credits)
  - Pepperwood
  - Oceanview Dairy
  - Beretta Dairy
  - Laguna 1 and 2 sediment removal
- Coordination with Town of Windsor

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# Special Provisions in Permit

- **Reopener Provisions**
  - Standard Revisions and Reasonable Potential
  - 303(d) – listed pollutants
  - Water Effects Rations and Metal Translators
  - Nutrients
  - Salt and Nutrient Management Plans
  - Title 22 Engineering Report
  - Temperature Study
  - Mixing Zone Study

- **Special Studies, Technical Reports and Additional Monitoring Requirements**
  - Pathogen Special Study
  - Engineering Evaluation of Recycled Water Storage ponds and Discharge Outfalls
  - Local Limits Evaluation
  - Sewer Use Ordinance Evaluation
  - Disaster Preparedness Assessment Report and Action Plan
  - Storage Pond Integrity Monitoring Program

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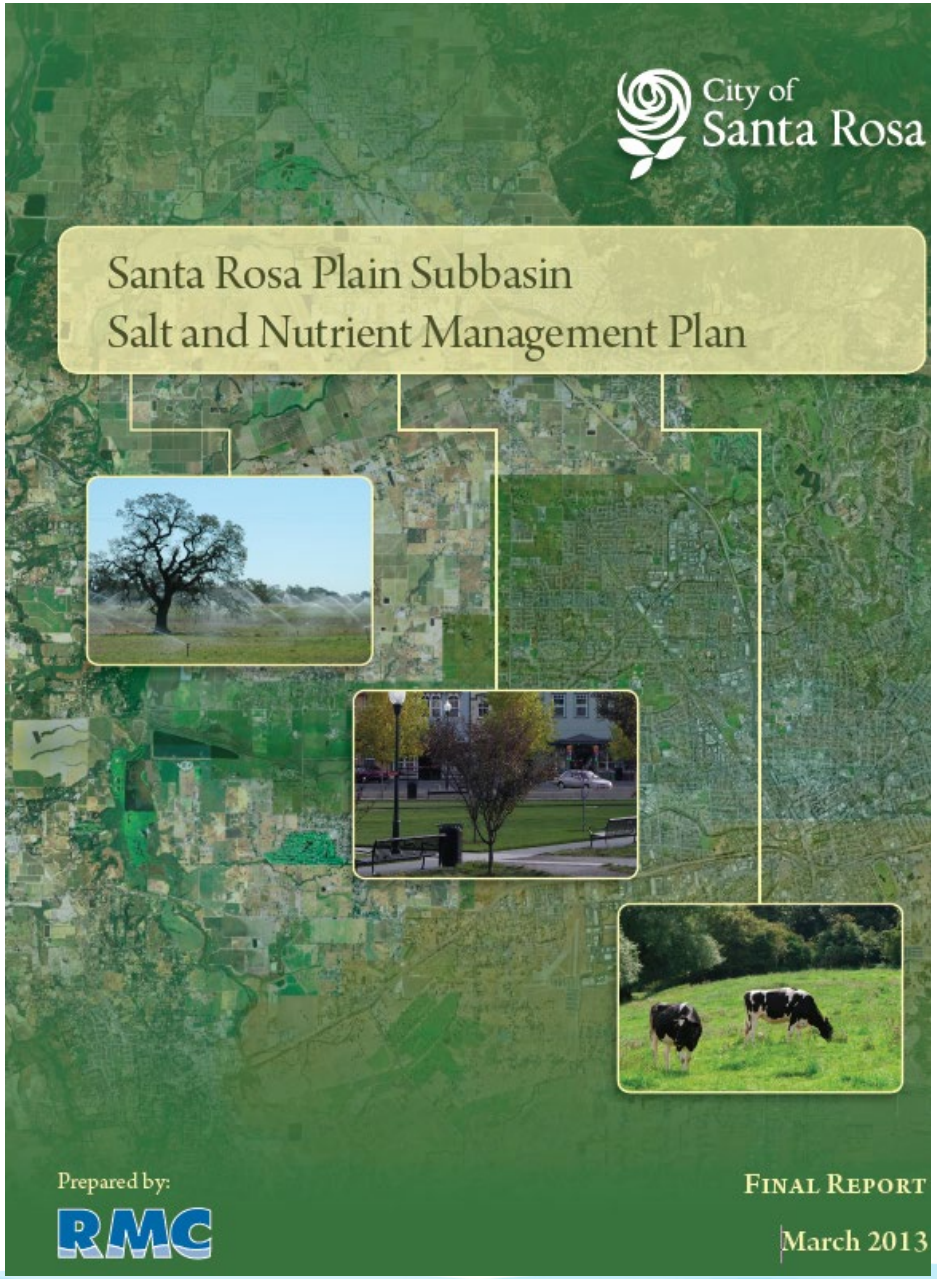
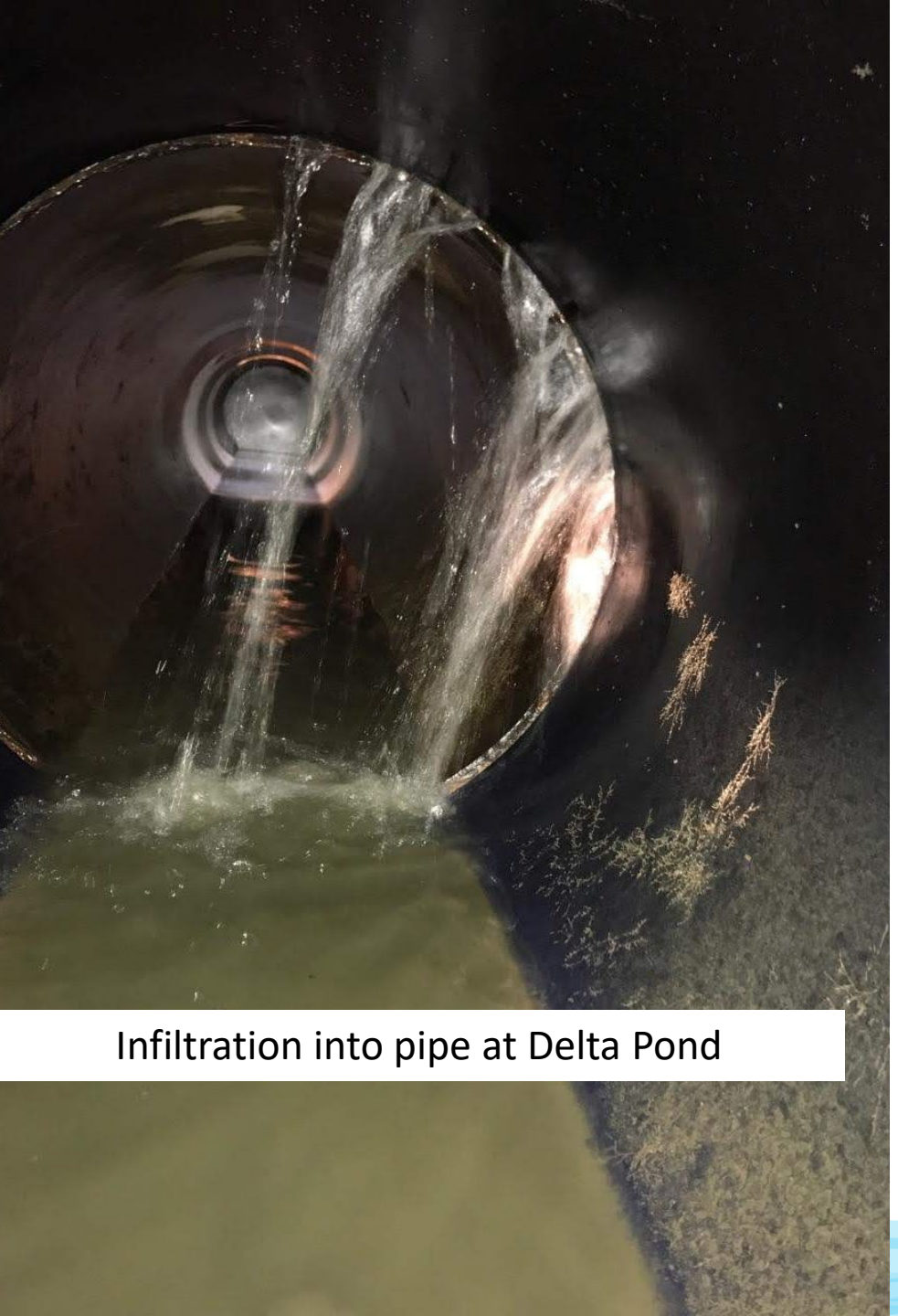



# Salt and Nutrient Management Plan

- Plan required by the State in order to manage salts, nutrients, and other significant chemical compounds on a watershed or basin-wide basis.
- Santa Rosa partnered with Cotati, Sebastopol, Rohnert Park, Windsor and Sonoma Water on our 2013 plan.
- Submitted a monitoring and reporting plan (MRP) for groundwater monitoring of wells in watershed.
- Next step is to receive the Regional Board feedback on the SNMP and the MRP to understand any needed revisions.

# Pathogen Special Study

- Russian River TMDL establishes bacteria water quality objectives for E. coli:
  - 100 CFU/100 mL rolling 6-week geometric mean
  - Not to exceed 320 CFU/100 mL no more than 10% of samples collected in calendar month
- New permit has weekly E. coli monitoring requirements while discharging
- Work Plan due August 1, 2021
- Final Report due July 31, 2024



Infiltration into pipe at Delta Pond

# Engineering Evaluation of Recycled Water Storage Ponds and Discharge Outfalls

- City has had unauthorized discharges in relation to discharge valves.
- Regional Board has concern about infrastructure associated with discharge points that have not been used in ~20 years.
- Work Plan Completed
  - Next step: Hire consultant to support staff evaluation
- Final Report due July 31, 2024

# Local Limits and Sewer Use Ordinance Evaluation

- In order to prevent interference or pass through of pollutants the City is required to conduct a local limits evaluation once during the permit term.
- Evaluate effectiveness of the sewer use ordinance
- Due February 1, 2024

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Sewer and water lift stations damaged by Tubbs Fire - 2017

# Disaster Preparedness Assessment Report and Action Plan

- *"Natural Disasters, extreme weather events, sea level rise, and shifting precipitation patterns, some of which are projected to intensify due to climate change, have significant implications for wastewater treatment and operations."*
- Assess areas of vulnerabilities related to extreme weather events and natural disasters.
- Identify control measures needed to protect infrastructure.
- Final Report due August 1, 2023

# PFAS and PFOA Sampling

- Special sampling protocols
- First round of results are complete for treatment plant
- Continue sampling treatment plant and start sampling groundwater wells

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# Laguna Environmental Lab Updates

- Replacing aging instruments over time- New GCMS
- New standards by the ELAP-885 new requirements will increase the costs of lab services

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# Questions